

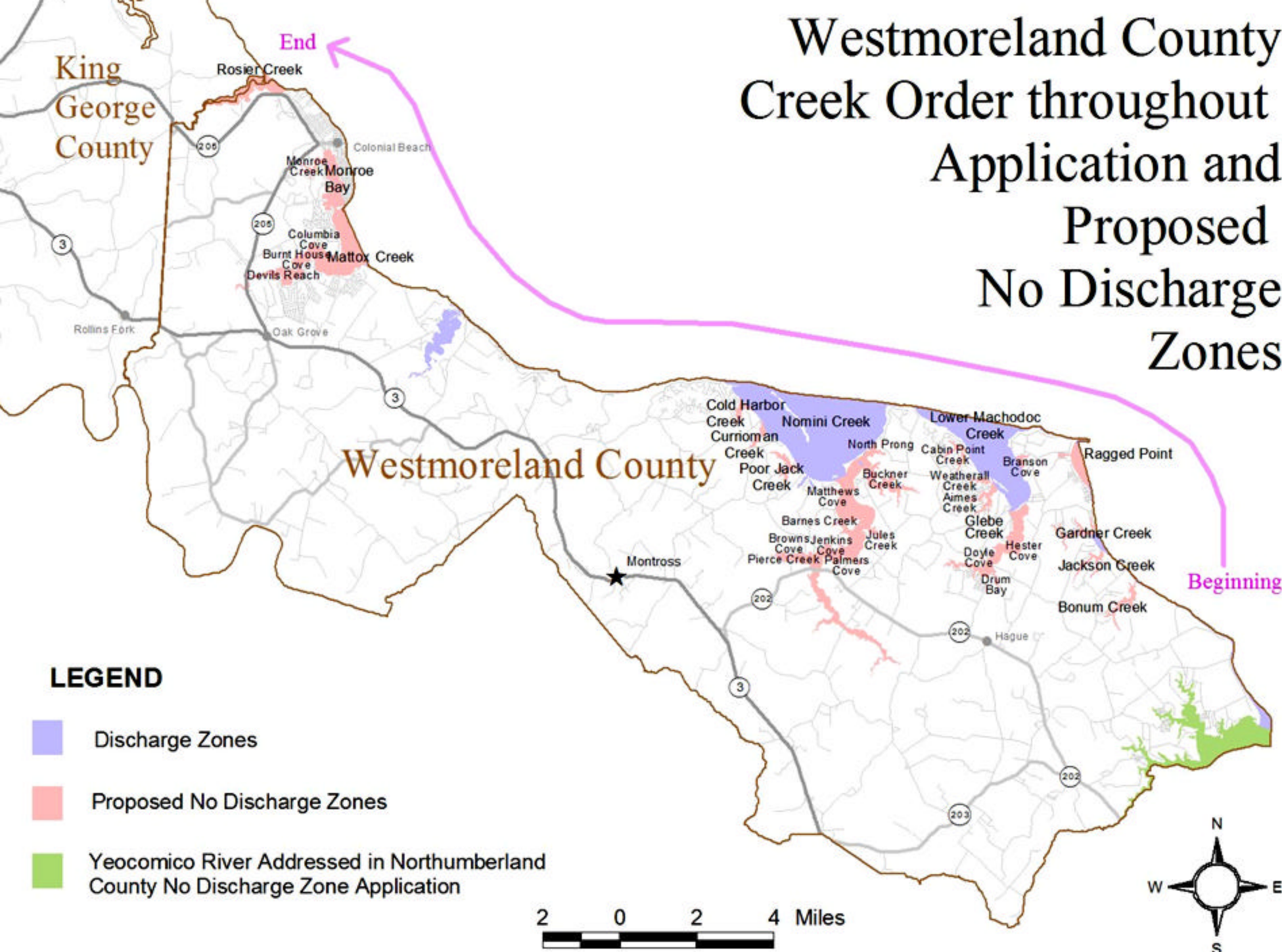
NO DISCHARGE ZONE APPLICATION

Westmoreland County



Tuesday, June 14th, 2011

Westmoreland County Creek Order throughout Application and Proposed No Discharge Zones



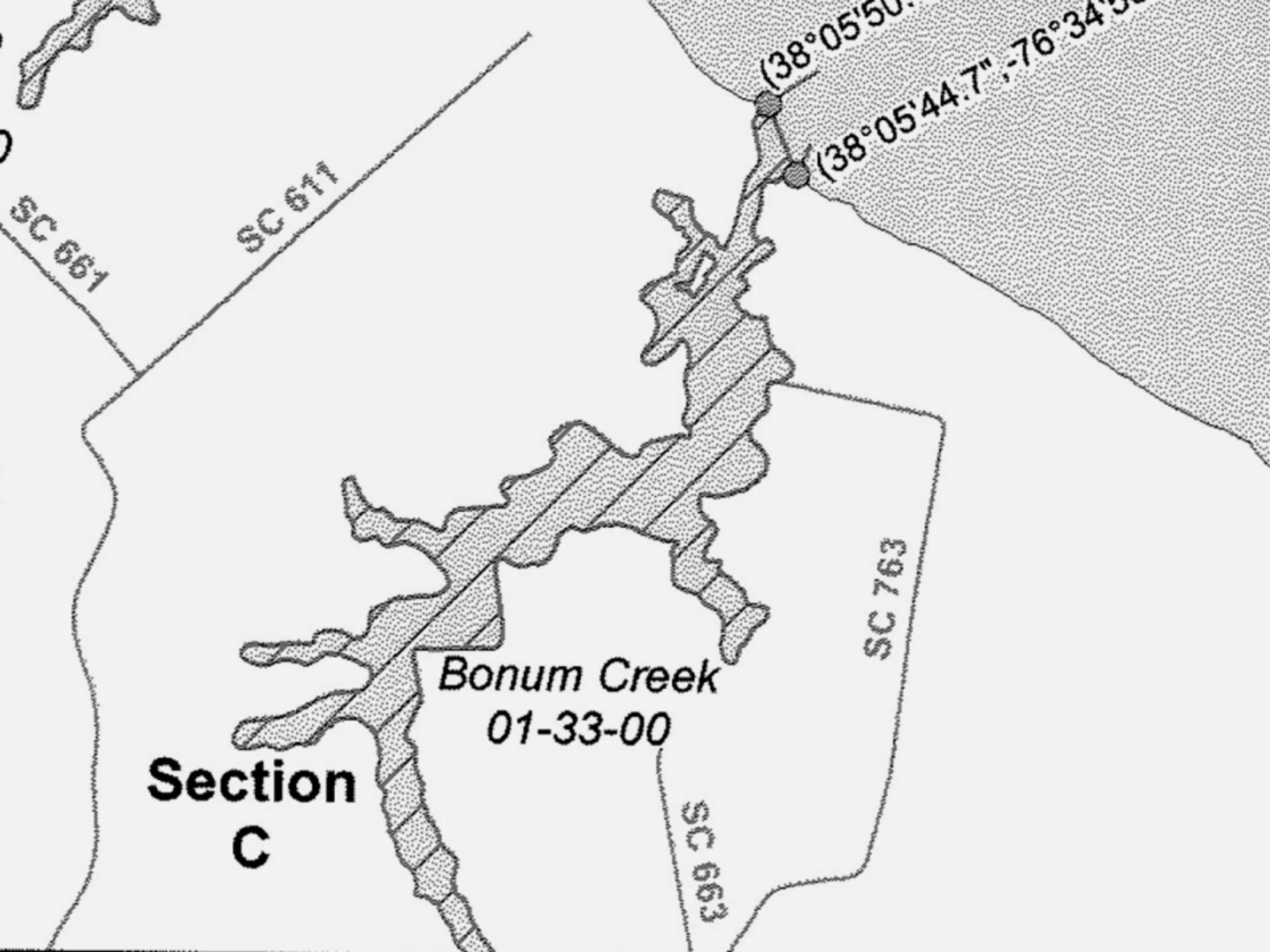


76°34'55.918"W
38°05'44.561"N

76°34'55.151"W
38°05'43.975"N

Bonum Creek

Bonum Creek



SC 661

SC 611

(38°05'50.00", -76°34'30.00")

(38°05'44.7", -76°34'30.00")

SC 763

Bonum Creek
01-33-00

**Section
C**

SC 663

Monroe Creek and Monroe Bay

Monroe
Creek

Monroe Bay

Winkedoodle
Marina/Monroe Bay
Marina

Colonial Beach
Yacht Center

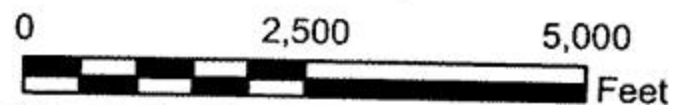
76°57'40.068"W
38°13'51.889"N

Com

N



Virginia Department of Health
Monroe Bay and Vicinity
Condemned Shellfish Area 002-001
26 January 2006



Westmoreland County



Condemned Areas
(Section A - B)

Monroe
Creek
01-55-01

Section
D

Section
C

Section
A

Section
M1

(38°14'54.1", -76°58'11.7")

(38°14'53.9", -76°57'57.1")

(38°14'30.2", -76°58'14.7")

(38°14'27.8", -76°58'09.6")

(38°14'26.8", -76°58'10.2")

(38°13'47.0", -76°57'52.3")

(38°13'46.1", -76°57'59.0")

(38°13'50.6", -76°57'50.0")

SC 632

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NUMBER OF VESSELS THAT WILL NEED FACILITIES

DATA SOURCES

- **Field surveys conducted by the NNPDC and submitted by marina operators**
- **Department of Game and Inland Fisheries (vessel registration database)***
- **Virginia Department of Health, Division of Waste Water Engineering (marina database)**
- **Federally-documented vessels (U.S. Coast Guard)***

Number of Facilities Needed

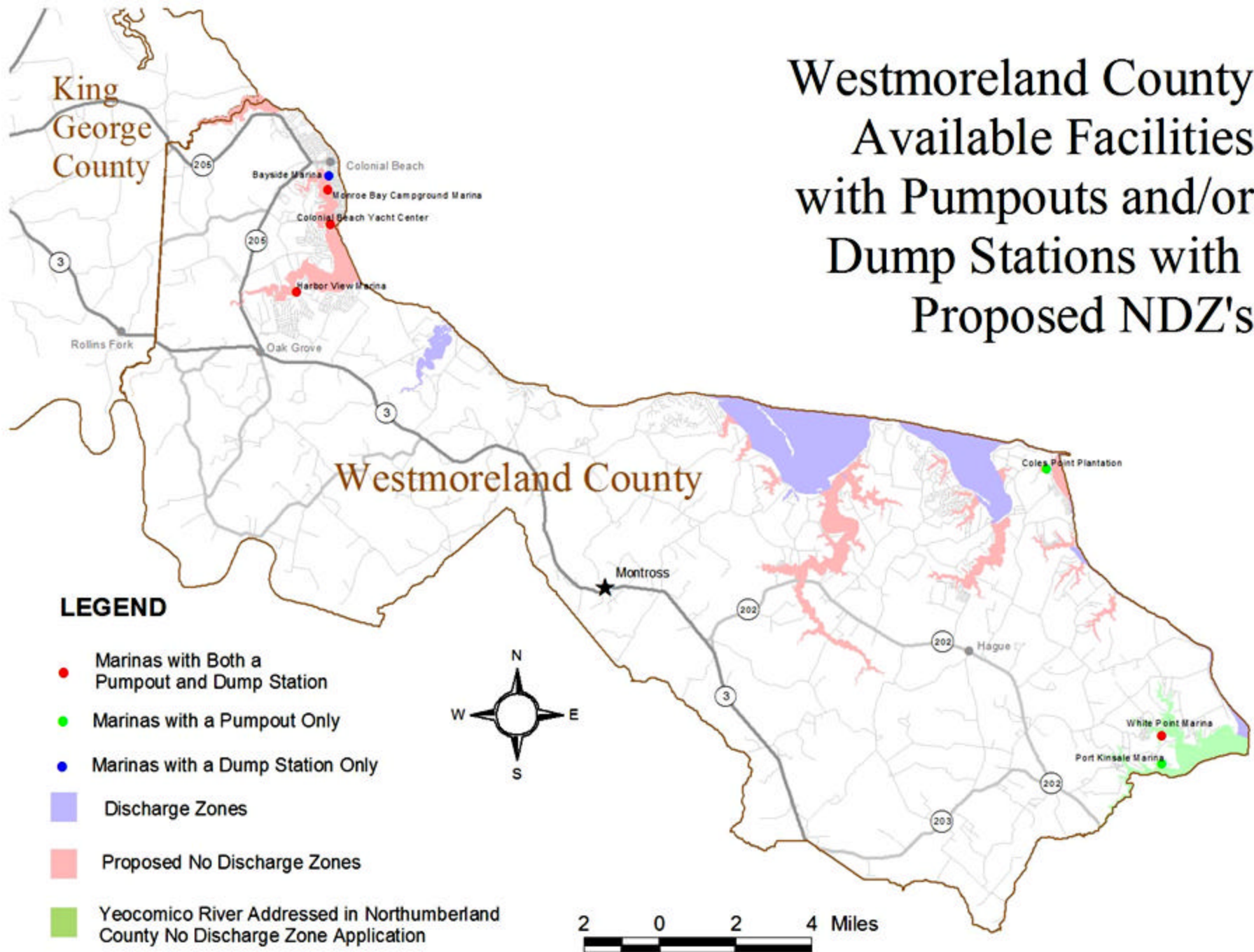
2 (1.11) pumpout facilities

3 (2.18) dump stations

To calculate the estimated number of facilities needed for the proposed NDZ areas, this application utilizes an Environmental Protection Agency formula, titled *Boater Sanitary Waste Reception Facility Requirements Worksheet*.

Westmoreland County has 4 (four) marinas with weekend hours and *both* dump-station and pumpout services for customers within the proposed No Discharge Zone.

Westmoreland County Available Facilities with Pumpouts and/or Dump Stations with Proposed NDZ's



SUMMARY

- Water bodies are compromised by bacterial impairment, low-dissolved oxygen, and conditions that impair growth of aquatic plants
- Water bodies fail to meet water-quality standards
- Pumpout facilities and dump stations are available to serve the estimated vessel population using these waters
- NDZs protect low-flushing tidal tributaries
- The Virginia Department of Environmental Quality deems these water bodies excellent candidates for No Discharge Zone designation

QUESTIONS?



**Virginia Department of
Environmental Quality**

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Glen Allen VA 23060

Fax 804.527.5106

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**The Northern Neck Planning
District Commission**

P.O. Box 1600

Warsaw, Virginia 22572

804.333.1900

www.nnpdc.org

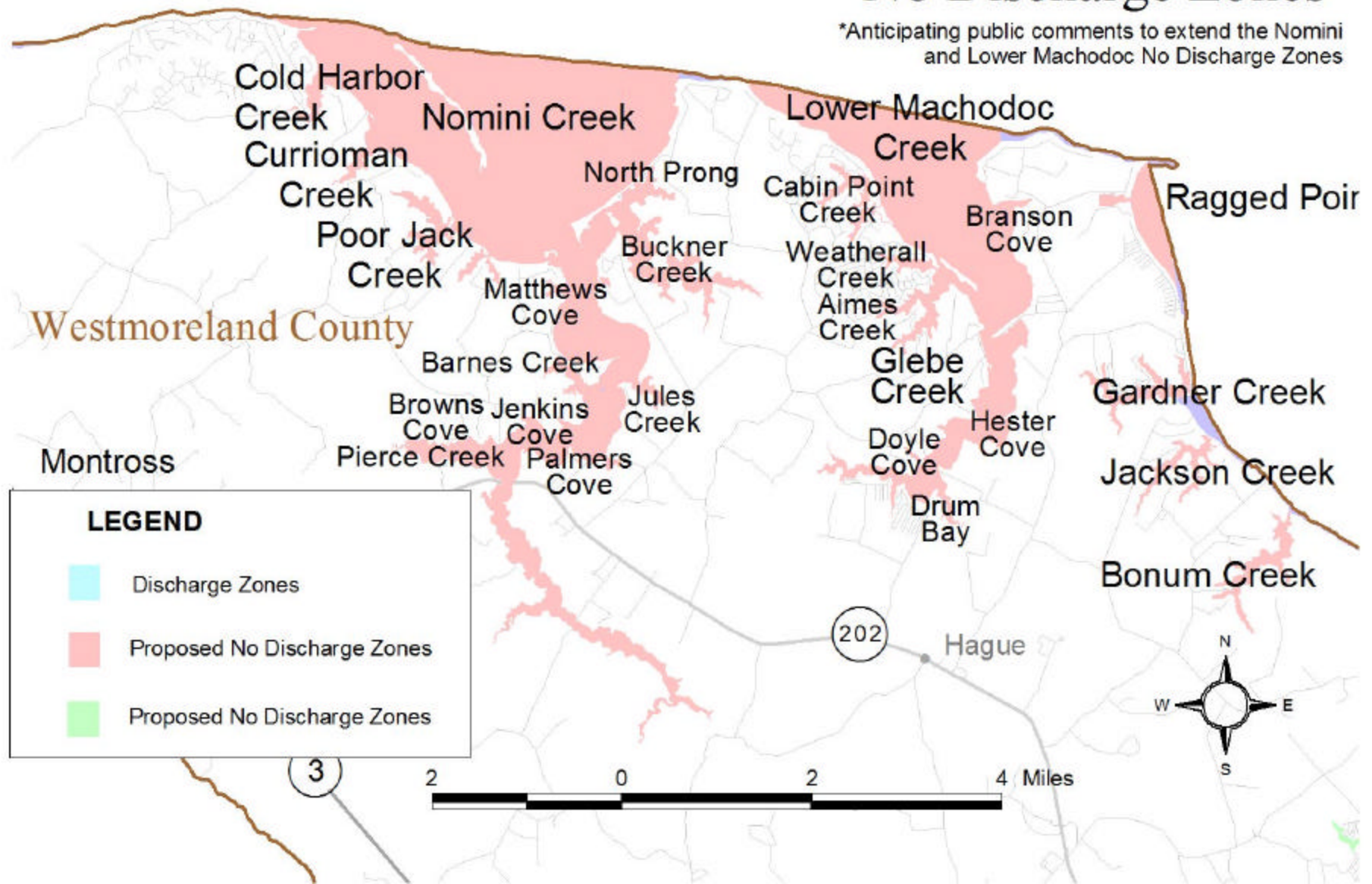
Draft Application Online:

<http://www.deq.virginia.gov/tmdl/ndz.html>

End of Comments Date: 7/14/2011

Westmoreland County Alternate Proposed No Discharge Zones*









*Anticipating public comments to extend the Nomini and Lower Machodoc No Discharge Zones





Virginia Coastal Zone MANAGEMENT PROGRAM

Legend

-  Baylor Grounds (Public Oyster Grounds)
-  Private Oyster Leases
-  State Constructed Oyster Reefs
-  Commercial Shellfish Aquaculture Sites
-  Hard clam
-  Soft clam
-  Oyster
-  Crab shed











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NUMBER OF VESSELS THAT WILL NEED **PUMPOUT** FACILITIES

Estimate of Required Pumpout Facilities	
A) Number of vessels 27-40 ft. in length	536
B) Enter % of 27-40 ft. vessels with holding tanks in Virginia ²	25%
C) Estimated number of 27-40 ft. vessels with holding tanks (multiply lines A and B)	134
D) Enter the number of vessels greater than 40 ft. in length	54
E) Estimated total number of vessels with holding tanks (addition of lines C and D)	188
F) Estimated peak occupancy rate (i.e. on a holiday weekend; if unknown, use 40%)	40%
G) Estimated number of vessels requiring pumpout facilities (multiply lines E and F)	75
H) Average number of vessels served per hour per pumpout (if unknown, use 4/hr)	4
I) Average number of weekend operating hours per facility (if unknown, use 24 hrs.)	17
J) Estimated number of vessels served per pumpout facility (multiply lines H and I)	68
K) Estimated number of pumpout facilities required (divide line G by line J)	1.11

NUMBER OF VESSELS THAT WILL NEED **DUMP STATION** FACILITIES

Estimate of Required Dump Stations	
L) Number of vessels 16-26 ft. in length	3,005
M) Enter % of 16-26 ft. vessels with portable toilets in Virginia ²	37%
N) Estimated number of vessels with portable toilets (multiply lines L and M)	1,112
O) Estimated peak occupancy rate (if unknown, use 40%)	40%
P) Estimated number of vessels requiring dump stations (multiply lines N and O)	445
Q) Average number of vessels served per hour per station (if unknown, use 12/hr)	12
R) Average number of weekend operating hours per station (if unknown, use 24 hrs.)	17
S) Estimated number of vessels served per dump station (multiply lines Q and R)	204
T) Estimated number of dump stations required (divide line P by line S)	2.18